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RULE 1200-1-11-.10 LAND DISPOSAL RESTRICTIONS

(1) GENERAL

(a) Purpose, Scope and Applicability [40 CFR 268.1]

1. This Rule identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.
2. Except as specifically provided otherwise in this Rule 1200-1-11-.02, the requirements of this Rule apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.
3. Restricted wastes may continue to be land disposed as follows:
 - (i) Where persons have been granted an extension to the effective date of a prohibition under paragraph (2) of this Rule or pursuant to subparagraph (1)(e) of this Rule with respect to those wastes covered by the extension;
 - (ii) Where persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this Rule, or 40 CFR 148, are not prohibited if the wastes:
 - (I) Are disposed into a nonhazardous or hazardous injection well as defined in Tennessee's Underground Injection Control Program, Rule Chapter 1200-4-6 [40 CFR 146.6(a)]; and
 - (II) Do not exhibit any prohibited characteristic of hazardous waste identified in Rule 1200-1-11-.02(3) at the point of injection; and
 - (iv) Wastes that are hazardous only because they exhibit a hazardous characteristic, and which are otherwise prohibited under this Rule, are not prohibited if the wastes meet any of the following criteria, unless the wastes are subject to a specified method of treatment other than DEACT in subparagraph (3)(a) of this Rule, or are D003 reactive cyanide:
 - (I) The wastes are managed in a treatment system which subsequently discharges to waters of the U.S. pursuant to a permit issued under section 402 of the Clean Water Act; or
 - (II) The wastes are treated for purposes of the pretreatment requirements of section 307 of the Clean Water Act; or
 - (III) The wastes are managed in a zero discharge system engaged in Clean Water Act-equivalent treatment as defined in part (2)(h)1 of this Rule; or
 - (IV) The wastes no longer exhibit a prohibited characteristic at the point of land disposal (i.e., placement in a surface impoundment).

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4. The requirements of this Rule shall not affect the availability of a waiver under section 121(d)(4) of the federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).
 5. The following hazardous wastes are not subject to any provision of this Rule:
 - (i) Waste generated by small quantity generators of less than 100 kilograms of non-acute hazardous waste or less than 1 kilogram of acute hazardous waste per month, as defined in Rule 1200-1-11-.02(1)(e);
 - (ii) Waste pesticides that a farmer disposes of pursuant to Rule 1200-1-11-.03(1)(a)7;
 - (iii) Wastes identified or listed as hazardous after November 8, 1984 for which Tennessee has not promulgated land disposal prohibitions or treatment standards; or
 - (iv) De minimis losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one per cent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million in the headworks of the facility's wastewater treatment or pretreatment facility.
 6. Universal waste handlers and universal waste transporters (as defined in Rule 1200-1-11-.01(2)(a)) are exempt from subparagraphs (1)(g) and (4)(a) of this Rule for the hazardous wastes listed in Rule 1200-1-11-.12(1)(a). These handlers are subject to regulation under Rule 1200-1-11-.12.
- (b) Definitions Applicable in this Rule [40 CFR 268.2]

When used in this Rule the following terms have the meanings given below:

1. "Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: Any material for which a specific treatment standard is provided in paragraph (3) of this Rule, namely lead acid batteries, cadmium batteries, and radioactive lead solids; Process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and Intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by subparagraph (3)(f) of this Rule and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

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2. "Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond which are listed under Appendix III of paragraph (5) of this Rule.
 3. "Hazardous constituent or constituents" means those constituents listed in Appendix VIII to Rule 1200-1-11-.02(5).
 4. "Hazardous debris" means debris that contains a hazardous waste listed in Rule 1200-1-11-.02(4), or that exhibits a characteristic of hazardous waste identified in Rule 1200-1-11-.02(3). Any deliberate mixing of prohibited hazardous waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in subparagraph (1)(c) of this Rule.
 5. "Inorganic metal-bearing waste" is one for which the Department established treatment standards for metal hazardous constituents, and which does not otherwise contain significant organic or cyanide content as described in subpart (c)3(i) of this paragraph, and is specifically listed in Appendix XI of this Rule.
 6. "Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.
 7. "Nonwastewaters" are wastes that do not meet the criteria for wastewaters in part (1)(b)11 of this Rule.
 8. "Polychlorinated biphenyls" or "PCBs" are halogenated organic compounds defined in accordance with 40 CFR 761.3.
 9. "Soil" means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles as classified by the U.S. Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges or solids which is inseparable by simple mechanical removal processes and is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited hazardous waste with soil that changes its treatment classification (i.e., from waste to contaminated soil) is not allowed under the dilution prohibition in subparagraph (1)(c) of this Rule.
 10. "Underlying hazardous constituent" means any constituent listed in subparagraph (3)(i) of this Rule, Table UTS-Universal Treatment Standards, except fluoride, selenium, sulfides, vanadium and zinc, which can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standards.
 11. "Wastewaters" are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS).
 12. All other terms have the meanings given under Rules 1200-1-11-.01(2)(a), .02(1)(b), or .02(1)(c).
- (c) Dilution prohibited as a Substitute for Treatment [40 CFR 268.3]
1. Except as provided in part 2 of this subparagraph, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall in any way dilute a

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restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with paragraph (3) of this Rule, to circumvent the effective date of a prohibition in paragraph (2) of this Rule, to otherwise avoid a prohibition in paragraph (2) of this Rule, or to circumvent a land disposal prohibition imposed by T.C.A. §68-212-107(d)9.

2. Dilution of wastes that are hazardous only because they exhibit a characteristic in treatment systems which include land-based units which treat wastes subsequently discharged to a water of the United States pursuant to a permit issued under section 402 of the Clean Water Act (CWA), or which treat wastes in a CWA-equivalent treatment system, or which treat wastes for the purposes of pretreatment requirements under section 307 of the CWA is not impermissible dilution for purposes of this subparagraph unless a method other than DEACT has been specified in subparagraph (3)(a) of this Rule as the treatment standard, or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.
 3. Combustion of the hazardous waste codes listed in Appendix XI of this Rule is prohibited, unless the waste, at the point of generation, or after any bona fide treatment such as cyanide destruction prior to combustion, can be demonstrated to comply with one or more of the following criteria (unless otherwise specifically prohibited from combustion):
 - (i) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in subparagraph (3)(i) of this Rule;
 - (ii) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;
 - (iii) The waste, at point of generation, has reasonable heating value such as greater than or equal to 5000 BTU per pound;
 - (iv) The waste is co-generated with wastes for which combustion is a required method of treatment;
 - (v) The waste is subject to State and/or Federal requirements necessitating reduction of organics (including biological agents); or
 - (vi) The waste contains greater than 1% Total Organic Carbon (TOC).
 4. It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.
- (d) Treatment Surface Impoundment Exemption [40 CFR 268.4]
1. Wastes which are otherwise prohibited from land disposal under this Rule may be treated in a surface impoundment or series of impoundments provided that:
 - (i) Treatment of such wastes occurs in the impoundments;

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(ii) The following conditions are met:

(I) Sampling and testing

For wastes with treatment standards in paragraph (3) of this Rule and/or prohibition levels in paragraph (2) of this Rule or federal RCRA section 3004(d), the residues from treatment are analyzed, as specified in subparagraph (1)(g) of this Rule or subparagraph (2)(c) of this Rule, to determine if they meet the applicable treatment standards or where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified in the waste analysis plan under Rule 1200-1-11-.05(2)(d) or .06(2)(d), must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.

(II) Removal

The following treatment residues (including any liquid waste) must be removed at least annually: residues which do not meet the treatment standards promulgated under paragraph (3) of this Rule; residues which do not meet the prohibition levels established under paragraph (2) of this Rule or imposed by statute (where no treatment standards have been established); residues which are from the treatment of wastes prohibited from land disposal under paragraph (2) of this Rule (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes which are not delisted under Rule 1200-1-11-.01(3)(c). If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flow-through constitutes removal of the supernatant for the purpose of this requirement.

(III) Subsequent management

Treatment residues may not be placed in any other surface impoundment for subsequent management.

(IV) Recordkeeping

Sampling and testing and recordkeeping provisions of Rules 1200-1-11-.06(2)(d) and .05(2)(d);

(iii) The impoundment meets the design requirements of Rule 1200-1-11-.05(11)(b)1 or .06(11)(b)3, regardless that the unit may not be new, expanded, or a replacement, and be in compliance with applicable ground water monitoring requirements of Rules 1200-1-11-.05(6) or .06(6) unless:

(I) Exempted pursuant to Rule 1200-1-11-.06(11)(b)4 or 5 or to Rule 1200-1-11-.05(11)(b)3 or 4; or

(II) Upon application by the owner or operator, the Commissioner, after notice has been given by the owner or operator, as provided for in Rule

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1200-1-11-.07(7)(e) and as prepared and required by the Commissioner (the owner or operator has provided proof of the completion of all notice requirements to the Commissioner within ten (10) days following conclusion of the public notice procedures), and an opportunity to comment, has granted a waiver of the requirements on the basis that the surface impoundment:

- I. Has at least one liner, for which there is no evidence that such liner is leaking;
 - II. Is located more than one-quarter mile from an underground source of drinking water; and
 - III. Is in compliance with generally applicable ground water monitoring requirements for facilities with permits; or
- (III) Upon application by the owner or operator, the Commissioner, after public notice as set forth in item (II) of this subpart, and an opportunity to comment, has granted a modification to the requirements on the basis of a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into ground water or surface water at any future time; and
- (iv) The owner or operator submits to the Commissioner a written certification that the requirements of subpart (d)1(iii) of this paragraph have been met. The following certification is required:

“I certify under penalty of law that the requirements of Rule 1200-1-11-.10(1)(d)1(iii) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

- 2. Evaporation of hazardous constituents as the principal means of treatment is not considered to be treatment for purposes of an exemption under this subparagraph.

(e) (Reserved) [40 CFR 268.5]

(Note: The authority for implementing 40 CFR 268.5 Procedures for Case-by-Case Extensions to an Effective Date remains with the U.S. Environmental Protection Agency.)

(f) (Reserved) [40 CFR 268.6]

(Note: The authority for implementing 40 CFR 268.6 Petitions to Allow Land Disposal of a Prohibited Waste remains with the U.S. Environmental Protection Agency.)

(g) Testing, Tracking, and Recordkeeping Requirements for Generators, Treaters, and Disposal Facilities [40 CFR 268.7]

- 1. Requirements for generators:

- (i) A generator of hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in subparagraphs (3)(a), (3)(f), or (3)(j) of

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this Rule. This determination can be made in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, listed in Rule 1200-1-11-.01(2)(b), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste's extract. In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in subparagraph (3)(a) of this Rule, and are described in detail in subparagraph (3)(c) of this Rule, Table 1. These wastes, and soils contaminated with such wastes, do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards would have to be tested). If a generator determines they are managing a waste, or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, they must comply with the special requirements of subparagraph (1)(i) of this Rule in addition to any applicable requirements in this subparagraph.

- (ii) If the waste or contaminated soil does not meet the treatment standard: With the initial shipment of waste to each treatment or storage facility, the generator must send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the file. The notice must include the information in column ".10(1)(g)1(ii)" of the Generator Paperwork Requirements Table in subpart (iv) of this part. No further notification is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.

- (I) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

"I certify under penalty of law that I personally have examined this contaminated soil and it [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by Rule 1200-1-11-.10(3)(j)3."

- (II) (RESERVED)

- (iii) If the waste or contaminated soil meets the treatment standard at the original point of generation:

- (I) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in the file. The notice must include the information indicated in column ".10(1)(g)1(iii)" of the Generator Paperwork Requirements Table in .10(1)(g)1(iv) and the following certification statement, signed by an authorized representative:

"I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in Rule 1200-1-11-.10(3). I believe that the information I submitted is true, accurate, and

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complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.”

- (II) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in column .10(1)(g)1(iii) of the Generator Paperwork Requirements Table in subpart (iv) of this part.
- (III) If the waste changes, the generator must send a new notice and certification to the receiving facility, and place a copy in their files. Generators of hazardous debris excluded from the definition of hazardous waste under part (1)(c)6 of Rule 1200-1-11-.02 are not subject to these requirements.
- (iv) For reporting, tracking and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed: There are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to case-by-case extensions under subparagraph (e) of this paragraph, disposal in a no-migration unit under subparagraph (f) of this paragraph, or a national capacity variance or case-by-case capacity variance under paragraph (2) of this Rule. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column “.10(1)(g)1(iv)” of the Generator Paperwork Requirements Table below. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in their files.

Generator Paperwork Requirements Table

Required information	.10(1)(g)1(ii)	.10(1)(g)1(iii)	.10(1)(g)1(iv)	.10(1)(g)1(ix)
1. Hazardous Waste Code(s) and Manifest Number of first shipment.	√	√	√	√
2. Statement: this waste is not prohibited from land disposal.			√	
3. The waste is subject to the LDRs. The constituents of concern for F001-F005 and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice.	√	√		
4. The notice must include the applicable wastewater/nonwastewater category (see				

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parts (b)7 and 11 of this paragraph and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide).	√	√		
5. Waste analysis data (when available).	√	√	√	
6. Date the waste is subject to the prohibition.			√	
7. For hazardous debris, when treating with the alternative treatment technologies provided by subparagraph (3)(f) of this Rule: the contaminants subject to treatment, as described in part (3)(f)2 of this Rule; and an indication that these contaminants are being treated to comply with subparagraph (3)(f) of this Rule.	√		√	
8. For contaminated soil subject to LDRs as provided in part (3)(j)1 of this Rule, the constituents subject to treatment as described in part (3)(j)4 of this Rule, and the following statement: This contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by part (3)(j)3 of this Rule or the universal treatment standards.	√	√		
9. A certification is needed (see applicable section for exact wording).		√		√

- (v) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under Rule 1200-1-11-.03(4)(e) to meet applicable LDR treatment standards found at subparagraph (3)(a) of this Rule, the generator must develop and follow a written waste analysis plan which describes the procedures they will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table 1, subparagraph (3)(f) of this Rule, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:

- (I) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this Rule, including the selected testing frequency.
- (II) Such plan must be kept in the facility's on-site files and made available to inspectors.

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- (III) Wastes shipped off-site pursuant to this subpart must comply with the notification requirements of subpart (iii) of this part.
- (vi) If a generator determines that the waste or contaminated soil is restricted based solely on his knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using the test method 1311 in "Test Methods for Evaluating Solid waste, Physical/Chemical Methods," EPA Publication SW-846, listed in Rule 1200-1-11-.01(2)(b) of this Rule, and all waste analysis data must be retained on-site in the generator's files.
- (vii) If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or is exempted from regulation under Rule 1200-1-11-.02(1)(b) through (f) subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at Rule 1200-1-11-.02(1)(d)1(ii) or that are CWA- equivalent or are managed in an underground injection well regulated by the SDWA), he must place a one-time notice describing such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from regulation under Rule Chapter 1200-1-11, and the disposition of the waste, in the facility's on-site files.
- (viii) Generators must retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this subparagraph for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Commissioner. The requirements of this subpart apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under Rule 1200-1-11-.02(1)(b) through (f), or exempted from regulation under the Act, subsequent to the point of generation.
- (ix) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at part (3)(c)3 of this Rule:
- (I) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column ".10(1)(g)1(ix)" in the Generator Paperwork Requirements Table of subpart (iv) of this part, and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

"I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix IV to Rule 1200-1-11-.10 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at Rule 1200-1-11-.10(3)(c)3. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment."

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- (II) No further notification is necessary until such time that the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification must be sent and a copy placed in the generator's file.
 - (III) If the lab pack contains characteristic hazardous wastes (D001-D043), underlying hazardous constituents (as defined in part (1)(b)10 of this Rule) need not be determined.
 - (IV) The generator must also comply with the requirements in subparts 1(vi) and (vii) of this subparagraph.
- (x) Small quantity generators with tolling agreements pursuant to Rule 1200-1-11-.03(3)(a)5 must comply with the applicable notification and certification requirements of part 1 of this subparagraph for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Commissioner.
2. Treatment facilities must test their wastes according to the frequency specified in their waste analysis plans as required by Rule 1200-1-11-.06(2)(d) (for permitted TSDFs) or Rule 1200-1-11-.05(2)(d) (for interim status facilities). Such testing must be performed as provided in subparts 2(i), 2(ii) and 2(iii) of this subparagraph.
- (i) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues, using test method 1311 (the Toxicity Characteristic Leaching Procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 listed in Rule 1200-1-11-.01(2)(b)), to assure that the treatment residues extract meet the applicable treatment standards.
 - (ii) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that they meet the applicable treatment standards.
 - (iii) A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.
 - (I) No further notification is necessary until such time that the waste or receiving facility change, in which case a new notice must be sent and a copy placed in the treatment facility's file.
 - (II) The one-time notice must include these requirements:

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Treatment Facility Paperwork Requirements Table

Required information	.10(1)(g)2
1. Hazardous Waste Code(s) and Manifest Number of first shipment.	√
2. The waste is subject to the LDRs. The constituents of concern for F001-F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice.	√
3. The notice must include the applicable wastewater/nonwastewater category (see parts (b)7 and 11 of this paragraph) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide).	√
4. Waste analysis data (when available).	√
5. For contaminated soil subject to LDRs as provided in part (3)(j)1 of this Rule, the constituents subject to treatment as described in part (3)(j)4 of this Rule, and the following statement, "this contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by part (3)(j)3 of this Rule.	√
6. A certification is needed (see applicable section for exact wording).	√

- (iv) The treatment facility must submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. A certification is also necessary for contaminated soil and it must state:

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that it has been maintained and operated properly so as to comply with the treatment standards specified in Rule 1200-1-11-.10(3)(j) without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

- (I) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the file.
- (II) Debris excluded from the definition of hazardous waste under Rule 1200-1-11-.02(1)(c)6 (i.e., debris treated by an extraction or destruction technology provided by Table 1, subparagraph (3)(f) of this Rule, and debris that the Commissioner has determined does not contain hazardous waste), however, is subject to the notification and certification requirements of part 4 of this subparagraph rather than the certification requirements of this subpart.
- (III) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in part on the analytical detection limit

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alternative specified in part (3)(a)4 of this Rule, the certification, signed by an authorized representative, must state the following:

“I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in Rule 1200-1-11.10(3)(c), Table 1. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

- (IV) For characteristic wastes that are subject to the treatment standards in subparagraph (3)(a) of this Rule (other than those expressed as a method of treatment) or subparagraph (3)(j) of this Rule and that contain underlying hazardous constituents as defined in part (1)(b)10 of this Rule; if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification must state the following:

“I certify under penalty of law that the waste has been treated in accordance with the requirements of Rule 1200-1-11.10(3)(a) or Rule 1200-1-11.10(3)(j) to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

- (V) For characteristic wastes that contain underlying hazardous constituents as defined in part (1)(b)10 of this Rule that are treated on-site to remove the hazardous characteristic and to treat underlying hazardous constituents to levels in subparagraph (3)(i) of this Rule Universal Treatment Standards, the certification must state the following:

“I certify under penalty of law that the waste has been treated in accordance with the requirements of Rule 1200-1-11.10(3)(a) to remove the hazardous characteristic, and that underlying hazardous constituents, as defined in Rule 1200-1-11.10(1)(b)10, have been treated on-site to meet the Rule 1200-1-11.10(3)(i) Universal Treatment Standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.”

- (v) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this subparagraph.
- (vi) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of Rule 1200-1-11.09(3)(a)2 regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler) is not required to notify the receiving facility, pursuant to subpart (1)(g)2(iii) of this Rule. With each shipment of such wastes the owner or operator of the recycling facility must submit a certification described in subpart (1)(g)2(iv) of this Rule, and a notice which includes the information listed in subpart (1)(g)2(iii) of this Rule (except the manifest number) to the Division Director. The recycling facility also must keep records

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of the name and location of each entity receiving the hazardous waste-derived product.

3. Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to Rule 1200-1-11.09(3)(a)2, the owner or operator of any land disposal facility disposing any waste subject to restrictions under this part must:
 - (i) Have copies of the notice and certifications specified in part 1 or 2 of this subparagraph.
 - (ii) Test the waste, or an extract of the waste or treatment residue developed using the test method 1311 (the Toxicity Characteristic Leaching Procedure), described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 listed in Rule 1200-1-11.01(2)(b), to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in paragraph (3) of this Rule. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by Rule 1200-1-11.06(2)(d) or Rule 1200-1-11.05(2)(d).
4. Generators or treaters who first claim that hazardous debris is excluded from the definition of hazardous waste under Rule 1200-1-11.02(1)(c)6 (i.e., debris treated by an extraction or destruction technology provided by Table 1 of subparagraph (3)(f) of this Rule and debris that the Commissioner has determined does not contain hazardous waste) are subject to the following notification and certification requirements:
 - (i) A one-time notification, including the following information, must be submitted to the Commissioner:
 - (I) The name and address of the nonhazardous solid waste landfill (Subtitle D) facility receiving the treated debris;
 - (II) A description of the hazardous debris as initially generated, including the applicable Hazardous Waste Code(s); and
 - (III) For debris excluded under Rule 1200-1-11.02(1)(c)6, the technology from Table 1 of subparagraph (3)(f) of this Rule used to treat the debris.
 - (ii) The notification must be updated if the debris is shipped to a different facility, and, for debris excluded under Rule 1200-1-11.02(1)(c)6(i), if a different type of debris is treated or if a different technology is used to treat the debris.
 - (iii) For debris excluded under Rule 1200-1-11.02(1)(c)6, the owner or operator of the treatment facility must document and certify compliance with the treatment standards in Table 1 of subparagraph (3)(f) of this Rule as follows:
 - (I) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

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- (II) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and
- (III) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state the following:

"I certify under penalty of law that the debris has been treated in accordance with the requirements of Rule 1200-1-11.10 (3)(f). I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

- 5. Generators and treaters who first received from the Commissioner a determination that a given contaminated soil subject to LDRs as provided in part (3)(j)1 of this Rule no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in part (3)(j)1 of this Rule no longer exhibits a characteristic of hazardous waste must:
 - (i) Prepare a one-time only documentation of these determinations including all supporting information; and,
 - (ii) Maintain that information in the facility files and other records for a minimum of three years.
- (h) (RESERVED) [40 CFR 268.8]
- (i) Special Rules Regarding Wastes That Exhibit a Characteristic [40 CFR 268.9]
 - 1. The initial generator of a solid waste must determine each Hazardous Waste Code applicable to the waste in order to determine the applicable treatment standards under paragraph (3) of this Rule. For purposes of this Rule, the waste will carry the waste code for any applicable listed waste (Rule 1200-1-11-.02(4)). In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic waste codes (Rule 1200-1-11-.02(3)), except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in part 2 of this subparagraph. If the generator determines that their waste displays a hazardous characteristic (and is not D001 nonwastewaters treated by CMBST, RORGs, OR POLYM of subparagraph (3)(c) of this Rule, Table 1), the generator must determine the underlying hazardous constituents (as defined at part (1)(b)10 of this Rule) in the characteristic waste.
 - 2. Where a prohibited waste is both listed under Rule 1200-1-11-.02(4) and exhibits a characteristic under Rule 1200-1-11-.02(3), the treatment standard for the waste code listed in Rule 1200-1-11-.02(4) will operate in lieu of the standard for the waste code under Rule 1200-1-11-.02(3), provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.
 - 3. In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under Rule 1200-1-11-.02(3) may be land disposed unless the waste complies with the treatment standards under paragraph (3) of this Rule.

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4. Wastes that exhibit a characteristic are also subject to subparagraph (1)(g) of this Rule requirements, except that once the waste is no longer hazardous, a one-time notification and certification must be placed in the generator's or treater's files and sent to the Department. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes and/or if the nonhazardous solid waste landfill (Subtitle D) facility receiving the waste changes. However, the generator or treater need only notify the Department on an annual basis if such changes occur. Such notification and certification should be sent to the Department by the end of the calendar year, but no later than December 31.

(i) The notification must include the following information:

- (I) Name and address of the nonhazardous solid waste landfill (Subtitle D) facility receiving the waste shipment; and
- (II) A description of the waste as initially generated, including the applicable Hazardous Waste Code(s), treatability group(s), and underlying hazardous constituents (as defined in part (1)(b)10 of this Rule), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.

(ii) The certification must be signed by an authorized representative and must state the language found in subpart (1)(g)2(iv) of this Rule.

- (I) If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in item (1)(g)2(iv)(IV) of this Rule applies.

(II) (RESERVED)

(j) (RESERVED) [40 CFR 268.10]

(k) (RESERVED) [40 CFR 268.11]

(l) (RESERVED) [40 CFR 268.12]

(m) (Reserved) [40 CFR 268.13]

(Note: The authority for implementing 40 CFR 268.13 Schedule for Wastes Identified or Listed after November 8, 1984 remains with the U.S. Environmental Protection Agency.)

(n) Surface Impoundment Exemptions [40 CFR 268.14]

1. This subparagraph defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.
2. Wastes which are newly identified or listed pursuant to Tennessee Code Annotated (T.C.A.) §§68-212-106 and 107 and stored in a surface impoundment that is newly subject to Rule Chapter 1200-1-11 as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding that the waste is

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otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Rule 1200-1-11.05(6) within 12 months after promulgation of the new listing or characteristic.

3. Wastes which are newly identified or listed pursuant to Tennessee Code Annotated (T.C.A.) §§68-212-106 and 107, and treated in a surface impoundment that is newly subject to Rule Chapter 1200-1-11 as a result of the additional identification or listing, may continue to be treated in that surface impoundment, notwithstanding that the waste is otherwise prohibited from land disposal, provided that surface impoundment is in compliance with the requirements of Rule 1200-1-11.05(6) within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with subparagraph (1)(d) of this Rule.

(2) Prohibitions on Land Disposal [40 CFR 268 Subpart C]

(a) Waste Specific Prohibitions -- Wood Preserving Wastes [40 CFR 268.30]

1. Effective September 12, 1998, the following wastes are prohibited from land disposal: the wastes specified in Rule 1200-1-11.02 as Hazardous Waste codes F032, F034, and F035.
2. Effective May 12, 1999, the following wastes are prohibited from land disposal: soil and debris contaminated with F032, F034, F035; and radioactive wastes mixed with Hazardous waste codes F032, F034, and F035.
3. Between September 12, 1998 and May 12, 1999, soil and debris contaminated with F032, F034, F035; and radioactive waste mixed with F032, F034, and F035 may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in subparagraph (1)(e) of this Rule.
4. The requirements of parts 1 and 2 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule; or
 - (iv) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to those wastes covered by the extension.
5. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of

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subparagraph (3)(i) of this Rule, the waste is prohibited from land disposal, and all requirements of this Rule are applicable, except as otherwise specified.

(b) Waste Specific Prohibitions -- Dioxin-Containing Wastes [40 CFR 268.31]

1. The dioxin-containing wastes specified in Rule 1200-1-11-.02(4)(b) as Hazardous Waste Codes F020, F021, F022, F023, F026, F027, and F028, are prohibited from land disposal unless the following condition applies:
 - (i) The F020-F023 and F026-F028 dioxin-containing waste is contaminated soil and debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or a corrective action taken under subtitle C of the Resource Conservation and Recovery Act (RCRA) or the Tennessee Hazardous Waste Management Act, as amended, TCA §§68-212-101 et seq.
2. The F020-F023 and F026-F028 dioxin-containing wastes listed in subpart (b)1(i) of this paragraph are prohibited from land disposal.
3. (Reserved) [40 CFR 268.31(c)]

(Note: The authority for implementing 40 CFR 268.31(c) pertaining to land disposal between November 8, 1988 and November 8, 1990 of the F020-F023 and F026-F028 dioxin-containing waste which is contaminated soil and debris resulting from a response action under CERCLA or a corrective action under RCRA remains with the U.S. Environmental Protection Agency.)

4. The requirements of parts (b)1 and 2 of this paragraph do not apply if:
 - (i) The wastes meet the standards of paragraph (3) of this Rule; or
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition; or
 - (iii) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to those wastes covered by the extension.
- (c) Waste specific prohibitions – Soils exhibiting the toxicity characteristic for metals and containing PCBs [40 CFR 268.32]
 1. The following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (D004-D011) and containing PCBs.
 2. The requirements of part 1 of this subparagraph do not apply if:
 - (i) (I) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and
 - (II) The wastes meet the treatment standards specified in paragraph (3) of this Rule for Hazardous Waste Codes D004-D011, as applicable; or

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- (ii) (I) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and
- (II) The wastes meet the alternative treatment standards specified in subparagraph (3)(j) of this Rule for contaminated soil; or
- (iii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule with respect to those wastes and units covered by the petition; or
- (iv) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule.

(d) Waste Specific Prohibitions-Chlorinated Aliphatic Wastes [40 CFR 268.33]

1. Effective July 22, 2002 the wastes specified in Rule 1200-1-11-.02 as Hazardous Waste Codes K174 and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.
2. The requirement of part 1 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of Rule 1200-1-11-.10, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule;
 - (iv) Hazardous debris has met the treatment standards in subparagraph (3)(a) of this Rule or the alternative treatment standards in subparagraph (3)(f) of this Rule;
 - (v) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
3. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of paragraph (3) of this Rule, the waste is prohibited from land disposal, and all requirements of Rule 1200-1-11-.10 are applicable, except as otherwise specified.
4. Disposal of K175 wastes that have complied with all applicable Rule 1200-1-11-.10(3)(a) treatment standards must also be macroencapsulated in accordance with Rule 1200-1-11-.10(3)(f) Table 1 unless the waste is placed in:

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- (i) A hazardous waste (Subtitle C) monofill containing only K175 wastes that meet all applicable Rule 1200-1-11-.10(3)(a) treatment standards; or
 - (ii) A dedicated hazardous waste (Subtitle C) landfill cell in which all other wastes being co-disposed are at pH≤ 6.0.
- (e) Waste Specific Prohibitions - Toxicity Characteristic Metal Wastes [40 CFR 268.34]
 - 1. Effective July 19, 1999, the following wastes are prohibited from land disposal: the wastes specified in Rule 1200-1-11-.02 as Hazardous Waste Codes D004 - D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxicity Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at Rule 1200-1-11-.02.
 - 2. Effective July 19, 1999, the following waste is prohibited from land disposal: Slag from secondary lead smelting which exhibits the Toxicity Characteristic due to the presence of one or more metals.
 - 3. Effective May 26, 2000, the following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with hazardous wastes D004 - D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxicity Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.
 - 4. Between July 19, 1999 and May 26, 2000, newly identified characteristic wastes from elemental phosphorus processing, radioactive waste mixed with D004 - D011 wastes that are newly identified (i.e. wastes, soil, or debris identified as hazardous by the Toxicity Characteristic Leaching Procedure but not the Extraction Procedure), or mixed with newly identified characteristic mineral processing wastes, soil, or debris may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in subparagraph (1)(e) of this Rule.
 - 5. The requirements of parts 1 and 3 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule; or
 - (iv) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
 - 6. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or

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the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable Universal Treatment Standard levels of subparagraph (3)(i) of this Rule, the waste is prohibited from land disposal, and all requirements of this Rule are applicable, except as otherwise specified.

(f) Waste Specific Prohibitions-Petroleum Refining Wastes [40 CFR 268.35]

1. Effective November 28, 2000, the wastes specified in Rule 1200-1-11-.02 as Hazardous Wastes Codes K169, K170, K171, and K172, soils and debris contaminated with these wastes, radioactive wastes mixed with these hazardous wastes, and soils and debris contaminated with these radioactive mixed wastes, are prohibited from land disposal.
2. The requirements of part 1 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule;
 - (iv) Hazardous debris that have met treatment standards in subparagraph (3)(a) of this Rule or in the alternative treatment standards in subparagraph (3)(f) of this Rule; or
 - (v) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
3. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable Universal Treatment Standard levels of subparagraph (3)(i) of this Rule, the waste is prohibited from land disposal, and all requirements of this Rule are applicable, except as otherwise specified.

(g) Waste Specific Prohibitions—Inorganic Chemical Wastes [40 CFR 268.36]

1. Effective January 12, 2004, the wastes specified in Rule 1200-1-11-.02 as Hazardous Wastes codes K176, K 177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.
2. The requirements of part 1 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;

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- (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule;
 - (iv) Hazardous debris has met the treatment standards in subparagraph (3)(a) of this Rule or the alternative treatment standards in subparagraph (3)(f) of this Rule;
 - (v) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
- 3. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of paragraph (3) of this Rule, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.
- (h) Waste Specific Prohibitions-Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated [40 CFR 268.37]
 - 1. The wastes specified in Rule 1200-1-11-.02(3)(b) as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in Rule 1200-1-11-.02(3)(c) as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.
 - 2. The wastes specified in Rule 1200-1-11-.02(3)(b) as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in Rule 1200-1-11-.02(3)(c) as D002, that are managed in systems defined in 40 CFR 144.6(e) and 146.6(e) as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.
- (i) Waste Specific Prohibitions-Newly Identified Organic Toxicity Characteristic Wastes and Newly Listed Coke By-product and Chlorotoluene Production Wastes [40 CFR 268.38]
 - 1. The wastes specified in Rule 1200-1-11-.02(4)(c) as Hazardous Waste Codes K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with Hazardous Waste Codes F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359, and soil and debris contaminated with D012-D043, K141-K145, and K147-K151 are prohibited from land disposal. The following wastes that are specified in Rule 1200-1-11-.02(3)(e) Table 1 as Hazardous Waste Codes: D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031,

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D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043 that are not radioactive, or that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or better than these technologies.

2. On September 19, 1996, radioactive wastes that are mixed with D018-D043 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies. Radioactive wastes mixed with K141-K145, and K147-K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.
 3. Between December 19, 1994 and September 19, 1996, the wastes included in part 2 of this subparagraph may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in subparagraph (1)(e) of this Rule.
 4. The requirements of parts 1,2, and 3 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule;
 - (iv) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
 5. To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable paragraph (3) of this Rule levels, the waste is prohibited from land disposal, and all requirements of Rule 1200-1-11.10 are applicable, except as otherwise specified.
- (j) Waste Specific Prohibitions--Spent Aluminum Potliners; Reactive; and Carbamate Wastes [40 CFR 268.39]

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1. On November 11, 1997, the wastes specified in Rule 1200-1-11-.02(4)(c) as Hazardous Waste Codes K156-K159, and K161; and in Rule 1200-1-11-.02(4)(d) as Hazardous Waste Codes P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U278-U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409-U411 are prohibited from land disposal. In addition, soil and debris contaminated with any of these wastes are prohibited from land disposal.
2. On November 11, 1997, the wastes identified in Rule 1200-1-11-.02(3)(d) as D003 that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices which have been the subject of an emergency response. (Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal (see subparagraph (3)(a) of this Rule)).
3. November 11, 1997, the wastes specified in Rule 1200-1-11-.02(4)(c) as Hazardous Waste Code K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.
4. On April 8, 1998, radioactive wastes mixed with K088, K156-K159, K161, P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U278-U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, or U409-U411 are prohibited from land disposal. In addition, soil and debris contaminated with any of these radioactive mixed wastes are prohibited from land disposal.
5. Between November 11, 1997 and April 8, 1998, the wastes included in parts 1, 3, and 4 of this subparagraph may be disposed in a landfill or surface impoundment, only if such unit is in compliance with the requirements specified in subparagraph (1)(e) of this Rule.
6. The requirements of parts 1, 2, 3, and 4 of this subparagraph do not apply if:
 - (i) The wastes meet the applicable treatment standards specified in paragraph (3) of this Rule;
 - (ii) Persons have been granted an exemption from a prohibition pursuant to a petition under subparagraph (1)(f) of this Rule, with respect to those wastes and units covered by the petition;
 - (iii) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under subparagraph (3)(e) of this Rule;
 - (iv) Persons have been granted an extension to the effective date of a prohibition pursuant to subparagraph (1)(e) of this Rule, with respect to these wastes covered by the extension.
7. To determine whether a hazardous waste identified in this subparagraph exceeds the applicable treatment standards specified in subparagraph (3)(a) of this Rule, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable paragraph (3) of this Rule levels, the waste is

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prohibited from land disposal, and all requirements of this Rule are applicable, except as otherwise specified.

(3) Treatment Standards [40 CFR 268 Subpart D]

(a) Applicability of Treatment Standards [40 CFR 268.40]

1. A prohibited waste identified in the table "Treatment Standards for Hazardous Wastes" may be land disposed only if it meets the requirements found in the table. For each waste, the table identifies one of three types of treatment standard requirements:
 - (i) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in the table for that waste ("total waste standards"); or
 - (ii) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in the table ("waste extract standards"); or
 - (iii) The waste must be treated using the technologies specified in the table ("technology standard"), which are described in detail in Table 1-Technology Codes and Description of Technology-Based Standards in subparagraph (3)(c) of this Rule.
2. For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, listed in Rule 1200-1-11-.01(2)(b), must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311, or Method 1310, the Extraction Procedure Toxicity Test. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Commissioner under the procedures set forth in part (3)(c)2 of this Rule.
3. When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.
4. Notwithstanding the prohibitions specified in part 1 of this subparagraph, treatment and disposal facilities may demonstrate (and certify pursuant to subpart (1)(g)2(v) of this Rule) compliance with the treatment standards for organic constituents specified by a footnote in the table "Treatment Standards for Hazardous Wastes" in this subparagraph, provided the following conditions are satisfied:
 - (i) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Rule 1200-1-11-.06(15), or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;
 - (ii) The treatment or disposal facility has used the methods referenced in subpart 4(i) of this subparagraph to treat the organic constituents; and

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- (iii) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this section by an order of magnitude.
5. For characteristic wastes (D001-D043) that are subject to treatment standards in the following table "Treatment Standards for Hazardous Wastes" and are not managed in a wastewater treatment system that is regulated under the Clean Water Act (CWA), that is CWA-equivalent, or that is injected into a Class I nonhazardous deep injection well, all underlying hazardous constituents (as defined in part (1)(b)10 of this Rule) must meet Universal Treatment Standards, found in subparagraph (i) of this paragraph, "Table Universal Treatment Standards," prior to land disposal as defined in part (1)(b)6 of this Rule.
 6. The treatment standards for F001-F005 nonwastewater constituents carbon disulfide, cyclohexanone, and/or methanol apply to wastes which contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication SW-846, listed in Rule 1200-1-11-.01(2)(b). If the waste contains any of these three constituents along with any of the other 25 constituents found in F001-F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, and/or methanol are not required.
 7. Between August 26, 1996 and March 4, 1999 the treatment standards for the wastes specified in Rule 1200-1-11-.02(4)(c) as Hazardous Waste Codes K156-K161; and in Rule 1200-1-11-.02(4)(d) as Hazardous Waste Codes P127, P128, P185, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411; and soil contaminated with these wastes; may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in this subparagraph, or by treating the waste by the following technologies; combustion, as defined by the technology code CMBST at subparagraph (c) of this paragraph Table 1, for nonwastewaters; and biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by the technology code CHOXD, or combustion as defined as technology code CMBST at subparagraph (c) of this paragraph Table 1, for wastewaters.
 8. Prohibited D004-D011 mixed radioactive wastes and mixed radioactive listed wastes containing metal constituents, that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage, do not have to be retreated to meet treatment standards in this subparagraph prior to land disposal.
 9. [RESERVED] [40 CFR 268.40(i)]
 10. Effective November 28, 2000, the treatment standards for the wastes specified in Rule 1200-1-11-.02(4)(d) as Hazardous Waste Codes P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in the table "Treatment Standards for Hazardous Wastes" in this subparagraph, or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at subparagraph (c) Table 1 of this paragraph, for nonwastewaters; and, biodegradation as defined by the technology code BIODG, carbon adsorption as defined by the technology code CARBN, chemical oxidation as defined by

the technology code CHOXD, or combustion as defined as technology code CMBST at subparagraph (c) Table 1 of this paragraph, for wastewaters.

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TREATMENT STANDARDS FOR HAZARDOUS WASTES (Note: Abbreviated Rule citations refer to Rule Chapter 1200-1-11.) (Note: NA means Not Applicable.)					
Waste Code	Waste Description and Treatment/Regulatory Subcategory ¹	REGULATED HAZARDOUS CONSTITUENT		WASTE-WATERS	NON-WASTE-WATERS
		Common Name	CAS ² Number	Concentration in mg/l ³ ; Or Technology Code ⁴	Concentration in mg/kg ⁵ unless noted as "mg/l TCLP"; or Technology Code ⁴
D001 ⁹	Ignitable Characteristic Wastes, except for the Rule 1200-1-11-.02(3)(b)1(i) High TOC Subcategory.	NA	NA	DEACT and meet .10(3)(i) standards ⁸ ; or RORGS; or CMBST	DEACT and meet Rule 1200-1-11-.10(3)(i) standards ⁸ ; or RORGS; or CMBST
	High TOC Ignitable Characteristic Liquids Subcategory based on Rule 1200-1-11-.02(3)(b)1(i) - Greater than or equal to 10% total organic carbon. (Note: This subcategory consists of nonwastewaters only.)	NA	NA	NA	RORGS; CMBST; or POLYM
D002 ⁹	Corrosive Characteristic Wastes.	NA	NA	DEACT and meet .10(3)(i) standards ⁸	DEACT and meet Rule 1200-1-11-.10(3)(i) standards ⁸
D002, D004, D005, D006, D007, D008, D009, D010, D011	Radioactive high level wastes generated during the reprocessing of fuel rods. (Note: This subcategory consists of nonwastewaters only.)	Corrosivity (pH)	NA	NA	HLVIT
		Arsenic	7440-38-2	NA	HLVIT
		Barium	7440-39-3	NA	HLVIT
		Cadmium	7440-43-9	NA	HLVIT



		Chromium (Total)	7440-47-3	NA	HLVIT
		Lead	7439-92-1	NA	HLVIT
		Mercury	7439-97-6	NA	HLVIT
		Selenium	7782-49-2	NA	HLVIT
		Silver	7440-22-4	NA	HLVIT
D003 ⁹	Reactive Sulfides Subcategory based on Rule 1200-1-11-.02(3)(d)1(v).	NA	NA	DEACT	DEACT
	Explosives Subcategory based on Rule 1200-1-11-.02(3)(d)1(vi), (vii) and (viii).	NA	NA	DEACT and meet .10(3)(i) standards ⁸	DEACT and meet Rule 1200-1-11-.10(3)(i) standards ⁸
	Unexploded ordnance and other explosive devices which have been the subject of an emergency response.	NA	NA	DEACT	DEACT
	Other Reactives Subcategory based on Rule 1200-1-11-.02(3)(d)1(i).	NA	NA	DEACT and meet .10(3)(i) standards ⁸	DEACT and meet Rule 1200-1-11-.10(3)(i) standards ⁸
	Water Reactive Subcategory based on Rule 1200-1-11-.02(3)(d)1(ii), (iii) and (iv). (Note: This subcategory consists of nonwastewaters only.)	NA	NA	NA	DEACT and meet Rule 1200-1-11-.10(3)(i) standards ⁸
	Reactive Cyanides Subcategory based on Rule 1200-1-11-.02(3)(d)1(v).	Cyanides (Total) ⁷	57-12-5	Reserved	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
D004 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Arsenic	7440-38-2	1.4 and meet .10(3)(i) standards ⁸	5.0 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸



D005 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Barium	7440-39-3	1.2 and meet .10(3)(i) standards ⁸	21 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸
D006 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Cadmium	7440-43-9	0.69 and meet .10(3)(i) standards ⁸	0.11 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸
	Cadmium Containing Batteries Subcategory. (Note: This subcategory consists of nonwastewaters only.)	Cadmium	7440-43-9	NA	RTHRM
D006 ⁹	Radioactively contaminated cadmium containing batteries. (Note: This subcategory consists of nonwastewaters only)	Cadmium	7440-43-9	NA	Macroencapsulation in accordance with subparagraph .10(3)(f)
D007 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Chromium (Total)	7440-47-3	2.77 and meet .10(3)(i) standards ⁸	0.60 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸
D008 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Lead	7439-92-1	0.69 and meet .10(3)(i) standards ⁸	0.75 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸



	Lead Acid Batteries Subcategory (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of Rule 1200-1-11-.10 or exempted under other regulations (see Rule 1200-1-11-.09(7)(a)). This subcategory consists of nonwastewaters only.)	Lead	7439-92-1	NA	RLEAD
	Radioactive Lead Solids Subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters only.)	Lead	7439-92-1	NA	MACRO
D009 ⁹	Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic Subcategory)	Mercury	7439-97-6	NA	IMERC; OR RMERC


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Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)	Mercury	7439-97-6	NA	RMERC
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain less than 260 mg/kg total mercury and that are residues from RMERC only. (Low Mercury Subcategory)	Mercury	7439-97-6	NA	0.20 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸
All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW846; and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury Subcategory)	Mercury	7439-97-6	NA	0.025 mg/l TCLP and meet Rule 1200-1-11-.10(3)(i) standards ⁸
All D009 wastewaters.	Mercury	7439-97-6	0.15 and meet -.10(3)(i) standards ⁸	NA
Elemental mercury contaminated with radioactive materials. (Note: This subcategory consists of nonwastewaters only.)	Mercury	7439-97-6	NA	AMLGM



	Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory. (Note: This subcategory consists of nonwastewaters only.)	Mercury	7439-97-6	NA	IMERC
D009 ⁹	Radioactively contaminated mercury containing batteries. (Note: This subcategory consists of nonwastewaters only)	Mercury	7439-97-6	NA	Macroencapsulation in accordance with subparagraph .10(3)(f)
D010 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Selenium	7782-49-2	0.82 and meet - .10(3)(i) standards ⁸	5.7 mg/l TCLP and meet - .10(3)(i) standards ⁸
D011 ⁹	Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on the toxicity characteristic leaching procedure (TCLP) in SW846.	Silver	7440-22-4	0.43 and meet - .10(3)(i) standards ⁸	0.14 mg/l TCLP and meet - .10(3)(i) standards ⁸
D011 ⁹	Radioactively contaminated silver containing batteries. (Note: This subcategory consists of nonwastewaters only)	Silver	7440-22-4	NA	Macroencapsulation in accordance with subparagraph .10(3)(f)
D012 ⁹	Wastes that are TC for Endrin based on the TCLP in SW846 Method 1311.	Endrin	72-20-8	BIODG; or CMBST	0.13 and meet - .10(3)(i) standards ⁸
		Endrin aldehyde	7421-93-4	BIODG; or CMBST	0.13 and meet - .10(3)(i) standards ⁸
D013 ⁹	Wastes that are TC for Lindane based on the TCLP in SW846 Method 1311.	alpha-BHC	319-84-6	CARBN; or CMBST	0.066 and meet - .10(3)(i) standards ⁸
		beta-BHC	319-85-7	CARBN; or CMBST	0.066 and meet - .10(3)(i) standards ⁸



		delta-BHC	319-86-8	CARBON; or CMBST	0.066 and meet - .10(3)(i) standards ⁸
		gamma-BHC (Lindane)	58-89-9	CARBON; or CMBST	0.066 and meet - .10(3)(i) standards ⁸
D014 ⁹	Wastes that are TC for Methoxychlor based on the TCLP in SW846 Method 1311.	Methoxychlor	72-43-5	WETOX or CMBST	0.18 and meet - .10(3)(i) standards ⁸
D015 ⁹	Wastes that are TC for Toxaphene based on the TCLP in SW846 Method 1311.	Toxaphene	8001-35-2	BIODG or CMBST	2.6 and meet - .10(3)(i) standards ⁸
D016 ⁹	Wastes that are TC for 2,4-D (2,4- Dichlorophenoxyacetic acid) based on the TCLP in SW846 Method 1311.	2,4-D (2,4- Dichloropheno- xyacetic acid)	94-75-7	CHOXD, BIODG, or CMBST	10 and meet - .10(3)(i) standards ⁸
D017 ⁹	Wastes that are TC for 2,4,5-TP (Silvex) based on the TCLP in SW846 Method 1311.	2,4,5-TP (Silvex)	93-72-1	CHOXD or CMBST	7.9 and meet - .10(3)(i) standards ⁸
D018 ⁹	Wastes that are TC for Benzene based on the TCLP in SW846 Method 1311.	Benzene	71-43-2	0.14 and meet - .10(3)(i) standards ⁸	10 and meet - .10(3)(i) standards ⁸
D019 ⁹	Wastes that are TC for Carbon tetrachloride based on the TCLP in SW846 Method 1311.	Carbon tetrachloride	56-23-5	0.057 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D020 ⁹	Wastes that are TC for Chlordane based on the TCLP in SW846 Method 1311.	Chlordane (alpha and gamma isomers)	57-74-9	0.0033 and meet - .10(3)(i) standards ⁸	0.26 and meet - .10(3)(i) standards ⁸
D021 ⁹	Wastes that are TC for Chlorobenzene based on the TCLP in SW846 Method 1311.	Chlorobenzene	108-90-7	0.057 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D022 ⁹	Wastes that are TC for Chloroform based on the TCLP in SW846 Method 1311.	Chloroform	67-66-3	0.046 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸



D023 ⁹	Wastes that are TC for o-Cresol based on the TCLP in SW846 Method 1311.	o-Cresol	95-48-7	0.11 and meet - .10(3)(i) standards ⁸	5.6 and meet - .10(3)(i) standards ⁸
D024 ⁹	Wastes that are TC for m-Cresol based on the TCLP in SW846 Method 1311.	m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77 and meet - .10(3)(i) standards ⁸	5.6 and meet - .10(3)(i) standards ⁸
D025 ⁹	Wastes that are TC for p-Cresol based on the TCLP in SW846 Method 1311.	p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77 and meet - .10(3)(i) standards ⁸	5.6 and meet - .10(3)(i) standards ⁸
D026 ⁹	Wastes that are TC for Cresols (Total) based on the TCLP in SW846 Method 1311.	Cresol-mixed isomers (Cresylic acid)(sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88 and meet - .10(3)(i) standards ⁸	11.2 and meet - .10(3)(i) standards ⁸
D027 ⁹	Wastes that are TC for p-Dichlorobenzene based on the TCLP in SW846 Method 1311.	p-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	0.090 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D028 ⁹	Wastes that are TC for 1,2-Dichloroethane based on the TCLP in SW846 Method 1311.	1,2-Dichloroethane	107-06-2	0.21 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D029 ⁹	Wastes that are TC for 1,1-Dichloroethylene based on the TCLP in SW846 Method 1311.	1,1-Dichloroethylene	75-35-4	0.025 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D030 ⁹	Wastes that are TC for 2,4-Dinitrotoluene based on the TCLP in SW846 Method 1311.	2,4-Dinitrotoluene	121-14-2	0.32 and meet - .10(3)(i) standards ⁸	140 and meet - .10(3)(i) standards ⁸
D031 ⁹	Wastes that are TC for Heptachlor based on the TCLP in SW846 Method 1311.	Heptachlor	76-44-8	0.0012 and meet - .10(3)(i) standards ⁸	0.066 and meet - .10(3)(i) standards ⁸
		Heptachlor epoxide	1024-57-3	0.016 and meet - .10(3)(i) standards ⁸	0.066 and meet - .10(3)(i) standards ⁸



D032 ⁹	Wastes that are TC for Hexachlorobenzene based on the TCLP in SW846 Method 1311.	Hexachlorobenzene	118-74-1	0.055 and meet - .10(3)(i) standards ⁸	10 and meet - .10(3)(i) standards ⁸
D033 ⁹	Wastes that are TC for Hexachlorobutadiene based on the TCLP in SW846 Method 1311.	Hexachlorobutadiene	87-68-3	0.055 and meet - .10(3)(i) standards ⁸	5.6 and meet - .10(3)(i) standards ⁸
D034 ⁹	Wastes that are TC for Hexachloroethane based on the TCLP in SW846 Method 1311.	Hexachloroethane	67-72-1	0.055 and meet - .10(3)(i) standards ⁸	30 and meet - .10(3)(i) standards ⁸
D035 ⁹	Wastes that are TC for Methyl ethyl ketone based on the TCLP in SW846 Method 1311.	Methyl ethyl ketone	78-93-3	0.28 and meet - .10(3)(i) standards ⁸	36 and meet - .10(3)(i) standards ⁸
D036 ⁹	Wastes that are TC for Nitrobenzene based on the TCLP in SW846 Method 1311.	Nitrobenzene	98-95-3	0.068 and meet - .10(3)(i) standards ⁸	14 and meet - .10(3)(i) standards ⁸
D037 ⁹	Wastes that are TC for Pentachlorophenol based on the TCLP in SW846 Method 1311.	Pentachlorophenol	87-86-5	0.089 and meet - .10(3)(i) standards ⁸	7.4 and meet - .10(3)(i) standards ⁸
D038 ⁹	Wastes that are TC for Pyridine based on the TCLP in SW846 Method 1311.	Pyridine	110-86-1	0.014 and meet - .10(3)(i) standards ⁸	16 and meet - .10(3)(i) standards ⁸
D039 ⁹	Wastes that are TC for Tetrachloroethylene based on the TCLP in SW846 Method 1311.	Tetrachloroethylene	127-18-4	0.056 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D040 ⁹	Wastes that are TC for Trichloroethylene based on the TCLP in SW846 Method 1311.	Trichloroethylene	79-01-6	0.054 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
D041 ⁹	Wastes that are TC for 2,4,5-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,5-Trichlorophenol	95-95-4	0.18 and meet - .10(3)(i) standards ⁸	7.4 and meet - .10(3)(i) standards ⁸



D042 ⁹	Wastes that are TC for 2,4,6-Trichlorophenol based on the TCLP in SW846 Method 1311.	2,4,6-Trichlorophenol	88-06-2	0.035 and meet - .10(3)(i) standards ⁸	7.4 and meet - .10(3)(i) standards ⁸
D043 ⁹	Wastes that are TC for Vinyl chloride based on the TCLP in SW846 Method 1311.	Vinyl chloride	75-01-4	0.27 and meet - .10(3)(i) standards ⁸	6.0 and meet - .10(3)(i) standards ⁸
F001, F002, F003, F004, & F005	F001, F002, F003, F004 and/or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichloromonofluoromethane, and/or xylenes [except as specifically noted in other subcategories]. See further details of these listings in Rule 1200-1-11-.02(4)(b).	Acetone	67-64-1	0.28	160
		Benzene	71-43-2	0.14	10
		n-Butyl alcohol	71-36-3	5.6	2.6


 The logo consists of the letters D, R, A, F, and T stacked vertically in a stylized, outlined font.

Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlorobenzene	108-90-7	0.057	6.0
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
Isobutyl alcohol	78-83-1	5.6	170
Methanol	67-56-1	5.6	NA
Methylene chloride	75-9-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36

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	Methyl isobutyl ketone	108-10-1	0.14	33
	Nitrobenzene	98-95-3	0.068	14
	Pyridine	110-86-1	0.014	16
	Tetrachloro-ethylene	127-18-4	0.056	6.0
	Toluene	108-88-3	0.080	10
	1,1,1-Trichloroethane	71-55-6	0.054	6.0
	1,1,2-Trichloroethane	79-00-5	0.054	6.0
	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
	Trichloroethylene	79-01-6	0.054	6.0
	Trichloromono-fluoromethane	75-69-4	0.020	30
	Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
F003 and/or F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001-5 solvents: carbon disulfide, cyclohexanone, and/or methanol. (formerly Rule 1200-1-11-.10(3)(b)3)	Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
	Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
	Methanol	67-56-1	5.6	0.75 mg/l TCLP



	F005 solvent waste containing 2-Nitropropane as the only listed F001-5 solvent.	2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
	F005 solvent waste containing 2-Ethoxyethanol as the only listed F001-5 solvent.	2-Ethoxyethanol	110-80-5	BIODG; or CMBST	CMBST
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F007	Spent cyanide plating bath solutions from electroplating operations.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590



		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP



		Silver	7440-22-4	NA	0.14 mg/l TCLP
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	NA
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	Cadmium	7440-43-9	NA	0.11 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30
		Lead	7439-92-1	0.69	0.75 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
		Silver	7440-22-4	NA	0.14 mg/l TCLP

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F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Cyanides (Total) ⁷	57-12-5	1.2	590
		Cyanides (Amenable) ⁷	57-12-5	0.86	30


 The logo consists of the letters D, R, A, F, and T stacked vertically. Each letter is stylized with a 3D effect, featuring a thick outline and a shadow.

F020, F021, F022, F023, F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022); and from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F023); (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).	HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001



		PeCDDs (All Pentachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachloro-dibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachloro-dibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
F024	Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in Rule 1200-1-11-.02(4)(b) or (c)).	All F024 wastes	NA	CMBST ¹¹	CMBST ¹¹

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		2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
		3-Chloropropylene	107-05-1	0.036	30
		1,1-Dichloroethane	75-34-3	0.059	6.0
		1,2-Dichloroethane	107-06-2	0.21	6.0
		1,2-Dichloropropane	78-87-5	0.85	18
		cis-1,3-Dichloropropylene	10061-01-5	0.036	18
		trans-1,3-Dichloropropylene	10061-02-6	0.036	18
		bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
		Hexachloroethane	67-72-1	0.055	30
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
		Nickel	7440-02-0	3.98	11 mg/l TCLP
F025	Condensed light ends from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025 - Light Ends Subcategory	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0



	1,2-Dichloroethane	107-06-2	0.21	6.0
	1,1-Dichloroethylene	75-35-4	0.025	6.0
	Methylene chloride	75-9-2	0.089	30
	1,1,2-Trichloroethane	79-00-5	0.054	6.0
	Trichloroethylene	79-01-6	0.054	6.0
	Vinyl chloride	75-01-4	0.27	6.0
Spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025 - Spent Filters/Aids and Desiccants Subcategory	Carbon tetrachloride	56-23-5	0.057	6.0
	Chloroform	67-66-3	0.046	6.0
	Hexachlorobenzene	118-74-1	0.055	10
	Hexachlorobutadiene	87-68-3	0.055	5.6
	Hexachloroethane	67-72-1	0.055	30
	Methylene chloride	75-9-2	0.089	30
	1,1,2-Trichloroethane	79-00-5	0.054	6.0

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		Trichloroethylene	79-01-6	0.054	6.0
		Vinyl chloride	75-01-4	0.27	6.0
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.).	HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachloro-dibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachloro-dibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

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F028	Residues resulting from the incineration or thermal treatment of soil contaminated with Hazardous Wastes Codes F020, F021, F023, F026, and F027.	HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001
		PeCDDs (All Pentachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		PeCDFs (All Pentachloro-dibenzofurans)	NA	0.000035	0.001
		Pentachlorophenol	87-86-5	0.089	7.4
		TCDDs (All Tetrachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
		TCDFs (All Tetrachloro-dibenzofurans)	NA	0.000063	0.001
		2,4,5-Trichlorophenol	95-95-4	0.18	7.4
		2,4,6-Trichlorophenol	88-06-2	0.035	7.4
		2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4



F032	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Rule 1200-1-11-.02(4)(f) or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or penta-chlorophenol.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4



	Dibenz(a,h)-anthracene	53-70-3	0.055	8.2
	2-4-Dimethyl phenol	105-67-9	0.036	14
	Fluorene	86-73-7	0.059	3.4
	Hexachloro-dibenzo-p-dioxins	NA	0.000063, or CMBST ¹¹	0.001, or CMBST ¹¹
	Hexachloro-dibenzofurans	NA	0.000063, or CMBST ¹¹	0.001, or CMBST ¹¹
	Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
	Naphthalene	91-20-3	0.059	5.6
	Pentachloro-dibenzo-p-dioxins	NA	0.000063, or CMBST ¹¹	0.001, or CMBST ¹¹
	Pentachloro-dibenzofurans	NA	0.000035, or CMBST ¹¹	0.001, or CMBST ¹¹
	Pentachlorophenol	87-86-5	0.089	7.4
	Phenanthrene	85-01-8	0.059	5.6
	Phenol	108-95-2	0.039	6.2
	Pyrene	129-00-0	0.067	8.2
	Tetrachloro-dibenzo-p-dioxins	NA	0.000063, or CMBST ¹¹	0.001, or CMBST ¹¹
	Tetrachloro-dibenzofurans	NA	0.000063, or CMBST ¹¹	0.001, or CMBST ¹¹
	2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
	2,4,6-Trichlorophenol	88-06-2	0.035	7.4
	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
	Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP

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F034	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	Acenaphthene	83-32-9	0.059	3.4
		Anthracene	120-12-7	0.059	3.4
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
		Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
		Benzo(a)pyrene	50-32-8	0.061	3.4
		Chrysene	218-01-9	0.059	3.4
		Dibenz(a,h)anthracene	53-70-3	0.055	8.2
		Fluorene	86-73-7	0.059	3.4
		Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
		Naphthalene	91-20-3	0.059	5.6
		Phenanthrene	85-01-8	0.059	5.6
		Pyrene	129-00-0	0.067	8.2
		Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP

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F035	Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol.	Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
		Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP



F037	<p>Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in Rule 1200-1-11-.02(4)(b)2(ii) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.</p>	Acenaphthene	83-32-9	0.059	NA
		Anthracene	120-12-7	0.059	3.4
		Benzene	71-43-2	0.14	10
		Benz(a)anthracene	56-55-3	0.059	3.4
		Benzo(a)pyrene	50-32-8	0.061	3.4

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bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP